## Pacific Possible

**Long-Term Opportunities and Challenges for Small Pacific Island Countries**

**Draft Concept Note**

**July 27, 2015**

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1) Introduction

1. Pacific Island Countries (PICs) face unique development challenges due to their economic geography. Past analytical work rightly pointed to structural barriers to growth (remoteness from major markets, fragmentation, small population size etc.) and to the reality of long-term aid dependency. Potential drivers of economic growth are limited to a few sectors (such as tourism and fishing). If historical low growth trends were to continue, most PICs would see only modest increases in living standards over the span of a generation.

2. Previous work focused primarily on the constraints to economic growth in PICs. It either generated long lists of required reforms and investments to overcome institutional, policy, and investment constraints faced by PICs (e.g., Pacific 2010, Pacific 2020, or the Pacific Plan) or concluded that the challenges faced by PICs are too difficult to overcome (Pacific Futures), giving rise to growth pessimism. This has resulted in a certain degree of frustration among governments and development partners, as implementing broad agendas was frequently constrained by the reality of thin implementation capacities, limited political capital for reform, and limited financial resources (even though PICs are the beneficiaries of the world’s highest aid inflows on a per capita basis). Governments often feel that despite all their efforts, the promised growth does not materialize, while development partners see insufficient reform efforts by governments as the cause of low growth and implied low effectiveness of aid. (Cairns Compact on Strengthening Development Coordination in the Pacific, August 2009, Forum communiqué, Fortieth Pacific Islands Forum)

3. Pacific Possible proposes an alternative way to look at the growth challenge of PICs. Instead of identifying general weaknesses in the business environment, public financial management, infrastructure, etc., Pacific Possible will take a long-term view of the development opportunities and challenges faced by PICs, and focus on those that could have transformational impacts on countries in the region. The study will seek to provide a realistic assessment of these opportunities and quantify potential increases in per capita GNP and government revenue by 2040, to the extent possible. Pacific Possible will also identify broad policy and institutional priorities and investments that would need to be developed in order to realize these opportunities.

4. The focus will be on the PICs that are members of the World Bank Group – Palau, Federated States of Micronesia, Marshall Islands, Kiribati, Papua New Guinea, Solomon Islands, Vanuatu, Fiji,
**Tonga, Samoa, and Tuvalu.** Some of the larger PICs such as Papua New Guinea, Fiji, and Solomon Islands clearly have a wider set of development opportunities than the smaller PICs. However, as important economies in the Pacific they are central to many themes addressed by Pacific Possible and therefore included here. Under the theme of working together, the role of the larger PICs is also central to many of the initiatives underway in the Pacific.

5. **During the preparation of the concept note, the team held three rounds of consultations.** The first round was led by Axel van Trotsenburg (RVP, EAP) and included stakeholders in Australia, Fiji, New Zealand, Tonga and Samoa from government, the private sector, NGOs, and academic and research institutions. The second round included discussions with U.S. based government agencies with an interest in the Pacific. The third round covered China, Japan, and Korea, again with representatives from government, the private sector, NGOs, and academic and research institutions.

6. **Participants in the consultations were broadly supportive of the initiative, welcoming in particular the focus on a few key issues, the proposed analytical rigor that the Bank wants to bring to the exercise, and an approach that recognizes that many of the challenges and opportunities faced by Pacific Island countries often require collaboration and also actions by larger and more developed countries in the region and internationally, especially in the areas of fishing, climate change and labor mobility.** The consultations generally confirmed the areas of focus for *Pacific Possible* laid out in the concept note and provided helpful discussion and suggestions for shaping the work in the individual thematic areas. However, the consultations also pointed to the need to spell out clearly why some important issues such as agriculture, governance, or financial sector development are not covered in *Pacific Possible*. In addition, participants also highlighted the importance of positioning *Pacific Possible* clearly with respect to other work and initiatives to avoid duplication and to ensure that relevant work and analysis are reflected.

7. **This concept note starts with a brief discussion of the PICs’ long-term growth challenge and a review of previous work on PICs’ development opportunities.** This is followed by a discussion of the objectives of *Pacific Possible* as well as what it will do and not do and how it relates to other work. The note then proposes a set of themes that would be the focus of the analysis, and concludes with a discussion of the process, partnerships, budget and team to carry out the task.
2) The Pacific Island Countries’ growth challenge

8. The literature on the economic performance of PICs highlights geographical features such as remoteness from international markets, lack of scale due to small land areas and populations, and fragmentation through the dispersion of population and production over a large number of islands in far-flung archipelagoes. Figure 1 shows that PICs combine smallness and remoteness to a much higher degree than other groups of countries, including small island states in the Caribbean.

*Figure 1. Smallness and Remoteness sets the PICs apart*

9. **Being not only very small, but also very remote, severely constrains countries’ areas of international competitiveness and growth potential.** Due to high transport cost, PICs are not able to overcome the lack of economies of scale through export orientation. Indeed, the only economically viable growth areas are those that draw on PICs’ resource endowments, primarily fishing and tourism. The PICs’ historic growth performance clearly reflects these constraints. Figure 2 shows that most PICs have generated only very modest rates of economic growth during the past decade. Virtually all Polynesian and Micronesian economies have registered per capita income growth rates of less than one percent. Only the Melanesian countries have been able to achieve higher growth, reflecting partly their more abundant resource endowments, especially mining and logging, and also their slightly larger size, which makes the constraints faced by the smaller Polynesian and Micronesian countries less binding.
10. **IMF/WB projections of long-term economic growth for PICs broadly mirror historical growth rates** (Figure 3). Only Palau and Fiji are projected to be able to generate per capita GDP growth of more than two percent annually in the long term. All other countries have projected growth rates of less than two percent. Especially worrying is the fact that some countries with currently lower per capita GDP also have lower projected growth rates. None of the countries comes close to the high growth rates of several East Asian economies of six to seven percent. This implies that with current trends, PICs are going to fall significantly behind other countries.

*Figure 3. ... and current projections only show small improvements in economic growth performance...*
11. As a result of low projected growth rates, per capita income levels in 2040 are projected to be only moderately higher than at present (Figure 4). Pacific Possible will examine whether these modest increases in welfare are indeed the unavoidable future for most PICs or whether fully exploiting opportunities could lead to significantly better outcomes for these countries. The next section will briefly review what academics and development practitioners have to say about the economic fate of small island economies.

Economic Growth and Development in Small Pacific Island Countries

12. The academic literature on PICs highlights their unique development challenges and narrow range of economic opportunities. A taxonomy of small island economies proposed by Bertram (2006) classifies small island economies into three archetypes:

a. MIRAB (Migration-Remittances and Aid-Bureaucracy): Welfare and per capita incomes in these economies are determined by two stock-flow relationships
   - The stock of overseas-resident migrants and their descendants, which sustain the flow of remittances and new migrants; and

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Footnote:
1 The studies discussed in this section reflect a wide range of analytic work undertaken on the Pacific over the past two decades. However, we do not claim that they represent a universal consensus on the development outlook of the PICs. Indeed, there is still a lively debate in the academic literature and also among development practitioners as to how binding the constraints imposed by the economic geography of the Pacific are.
• The stock of domestic public-sector employment, which is sustained by the flow of aid.

b. SITE (Small Island Tourist Economies): In these countries, tourism is the main driver of economic activity.

c. PROFIT (People considerations – Resource management – Overseas engagement – Finance, Insurance, and taxation – Transport): PROFIT economies seek to exploit a broader set of economic opportunities through: shrewd immigration and cyclical migration policy; engaging in tough external negotiations concerning the use of local mineral, natural, political and other imaginative resources; securing and controlling viable means of transportation; and luring foreign direct investment via very low/no taxes.

13. In 2005, Bertram classified most of the Pacific Islands as MIRABs (Samoa, Tonga, RMI, FSM, Palau, Tuvalu, and Kiribati). Only Vanuatu was classified as a PROFIT. Ten years later, the classification probably still broadly holds with two exceptions. The first is Palau, which has developed an important tourism sector. However, at the same time remittances and foreign aid continue to play an important role. The other development is the Nauru Agreement, under which the Partners to the Nauru Agreement derive significant additional revenue from a cap and trade scheme (the “Vessel Day Scheme”) for tuna fishery licenses. This has resulted in significant additional revenues for Kiribati, Tuvalu, RMI, FSM, and Palau.

14. Economic growth in MIRAB countries depends primarily on inflows of aid and the number and generosity of overseas resident migrants. Increases in these flows generate economic growth, while constant or declining levels of aid and remittances result in economic stagnation or decline in the PICs. This is indeed the pattern found by Duncan (2015) in his review of growth episodes of PICs. The vast majority of growth episodes of PICs are triggered by changes in the amount of aid received or by external shocks such as cyclones. PROFITs and SITEs on the other hand have some capacity for private sector led growth.

15. Many efforts aimed at fostering economic growth in the PICs could be characterized as trying to move countries in the MIRAB category towards the SITE and PROFIT category. However, as Bertram notes, MIRAB type economies have in many instances been able to generate higher levels of welfare for their citizens than other types and may thus represent a fairly stable type of equilibrium.
There have been a number of attempts to identify feasible development paths and opportunities in the PICs, including through increased regional integration. AusAid supported the ANU-led studies Pacific 2010 (published in 1993) and Pacific 2020 – Challenges and Opportunities for Economic Growth (published in 2006). Pacific 2020 focused on the long-term growth prospects of PICs and how these could be improved. It analyzed four crosscutting ‘growth factors’ – investment (of capital), labor, land, and political governance – and five important ‘productive sectors’ – agriculture, fisheries, forestry, mining and petroleum, and tourism. Its country coverage included Timor Leste and Papua New Guinea in addition to the smaller Pacific Islands. It concluded that for most countries in the region – with the exception of perhaps the smallest – higher growth could be achieved. It concluded that a two-pronged approach to reform was needed: structural policy reforms and sensible public investment where a relatively quick growth impact can be expected, combined with more attention to the tough, long-term growth constraints (such as political governance and land tenure). The lead author of Pacific 2020 – Stephen Howes – indicates in a blog published in 2011 that most of the conclusions of the Pacific 2020 report remain relevant. ‘Poor institutions were holding growth back, but would only be improved by Pacific leaders themselves nurturing good governance “in a Pacific context rather than treating it as a foreign impost”. Poor infrastructure was a fundamental constraint. Integration and regional cooperation were not options but necessities. And the “single clearest message”: poor implementation was the most serious constraint to successful reform and thus rapid growth.” However, Howes also indicates that Pacific 2020 may have been overly optimistic with regard to the PICs’ ability to sustain growth, did not differentiate sufficiently across countries (especially by lumping PNG with the other PICs), did not say much about Australia’s role in delivering a good 2020 for the Pacific, and may have put too much emphasis on the importance of integration and regionalism at the expense of a more pragmatic and bilateral approach to regionalism and economic integration.’

Between 2009 and 2013, the World Bank organized a series of workshops, seminars, and meetings under the title ‘Pacific Futures’ aimed at sparking renewed discussion by analyzing the prospects for economic development in the PICs in light of the unique constraints posed by their geography. In particular, the PICs’ small size, remoteness from major trading partners, and internally dispersed populations make it difficult to achieve economies of scale, increasing the costs of private sector production and trade as well as the costs of providing public services and infrastructure. As a result,
exports as a proportion of GDP are low in the PICs, even compared with other small countries, and the manufacturing sector has generally remained insignificant, in contrast to the experience of other developing countries in the East Asia. Instead, PIC exports tend to be dominated by natural endowments (e.g. fish, minerals, forestry, and tourism), for which economic rents can be extracted even when the costs of production are relatively high. Understandably, remittances and international development assistance have also historically been very important in financing imports and consumption in the PICs.

18. Pacific Futures is less optimistic about the prospects for sustainable high economic growth of small PICs than was Pacific 2020. Because of their unique economic geography, the feasible development paths for PICs are likely to differ from the typical strategy followed by many other developing countries, which focuses on progressive increases in the value and sophistication of exports. In particular, in the PICs, reforms to improve the business environment are unlikely to be sufficient to ensure global competitiveness given the costs imposed by size and distance from markets. Moreover, implementing a full suite of policy and institutional reforms to assist exporters is likely to be beyond the reach of most PICs, given their constrained fiscal resources and limited capacity in many areas.

19. A key implication is that reforms should be targeted toward reducing the disadvantages imposed by geography, and on economic opportunities that are less affected by these disadvantages. The analysis in Pacific Futures suggests that the most likely prospects for development lie in four main areas. First, pursuing integration – with larger economies and also among the PICs – to reduce the economic costs of distance, including through increased labor market integration, better transport and communication links, and the alignment of regulatory frameworks and services. Second, pooling the provision of public services across small PICs (e.g. in telecommunications and competition regulation) to simultaneously reduce costs and mitigate demands on individual country capacity. Third, ensuring that gains from natural resource industries (including tourism) are maximized, and that these benefits are distributed broadly across the population. Fourth, maximizing the benefits from international assistance, recognizing that in many cases financial aid and capacity support is likely to continue to be required over the longer term. By suggesting that reforms should be narrowly focused on a small set of growth opportunities, Pacific Futures addresses the main finding of Pacific 2020, which identified poor implementation as the principal constraint to better growth outcomes.

20. Especially relevant to the first two of these recommendations was ‘The Pacific Plan’, which was adopted by Pacific Islands Forum Leaders in 2005 as the region’s strategy for strengthening cooperation and integration between Pacific countries. A 2013 Review of the Pacific Plan noted explicitly that rather
than being a regional development or funding plan (which would require substantial pooling of sovereignty) the Plan was best viewed as a framework for advancing Pacific regionalism. The Review concluded that further regional integration would entail a number of benefits, including: the realization of economies of scale through the regional provision of services, the delivery of regional public goods, the creation of larger markets and improvements in resource allocation, and the overcoming of national capacity constraints.

21. In light of the findings of the Review, in May 2014 Forum leaders agreed to recast the Pacific Plan as the ‘Framework for Pacific Regionalism’, which would articulate a regional vision and strategic direction for the Pacific, as well as a set of processes that enabled Leaders to identify and implement initiatives to move the regional project forward. The Framework presents four strategic objectives, which closely follow the four pillars of the original Pacific Plan: (i) sustainable development, (ii) equitable and inclusive economic growth, (iii) strengthened governance, and (iv) security.

22. Importantly, the Review also proposes that the PIFS collaborate with multilateral finance and development institutions on

- supporting PICs in the development of prioritized growth strategies (recommendation 1);
- examining a range of issues, including the question of what, in the Pacific context, is a ‘reasonable’ standard of living and how close can different PIC’s reasonably get to this level of per capita income over the next 20-40 years (recommendation 5);
- developing uniquely Pacific indicators of both poverty and progress (recommendation 6); and
- updating the case for regional integration (recommendation 14).

3) Objectives and audience

23. Pacific Possible will build on previous work – especially Pacific Futures - and seek to quantify what could be achieved if the limited set of economic opportunities open to PICs was fully exploited. It will examine what increases in income and living standards could be achieved if Pacific decision makers got a number of key policy decisions right and if metropolitan countries around the Pacific Rim (Australia and NZ but also the US, China, Japan, Korea and others) played their part. The idea that aid will need to be a significant part of the Pacific landscape for some time to come has been firmly established during the World Bank’s earlier Pacific Futures work. The question now is whether significantly higher standards of living and reduced vulnerability are possible within a constant aid envelope.
24. It is hoped that the study will help to inform the development debate in the PICs by providing solid analysis of technical feasibility and economic impact of development opportunities and thus help to identify which opportunities are most promising and can be expected to have the highest impact in fostering shared prosperity in the Pacific. At the same time, Pacific Possible would also be an important piece of analysis to help inform the design of World Bank support and help guide the formulation of SCDs and CPFs as well as the Bank’s policy dialogue, which includes annual DPOs in six PICs.

25. In this context, it is also important to be clear about what the proposed work will not seek to achieve and how it relates to other work by the World Bank and other stakeholders in the region.

- First, Pacific Possible does not aim to generate a comprehensive assessment of long-term development issues for PICs. It is selective by focusing on transformative rather than incremental development opportunities.

- Second, Pacific Possible will also not purport to develop a development vision for the Pacific region or for individual PICs. It hopes to provide useful information and analysis to inform such processes which, however, will need to be led by national and regional leaders and be typically more encompassing than what will be covered by Pacific Possible.

- Third, Pacific Possible will also not attempt to offer operational actions plans for the realization of the development opportunities covered. However, it is hoped that Pacific Possible would help to prioritize areas of focus for the development of more concrete national or regional action plans.

26. With regard to the Bank’s work on Systematic Country Diagnostics (SCDs), Pacific Possible will adopt a long-term perspective as compared to the five year horizon of the SCDs. The Pacific Possible focus on long-term development opportunities is expected to help identify critical elements of the shared prosperity agenda. However, it will provide neither a comprehensive assessment of opportunities and constraints to poverty reduction and shared prosperity, nor will it not attempt to assess directly the impact of transformative development opportunities on poverty and shared prosperity, as this is best done in the context of the SCD and related poverty work. However, Pacific Possible will expand the knowledge base that can subsequently be used in the preparation of SCDs.

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3 Such as strengthening education and health services, improving governance and the business environment, etc.
27. The primary audience of *Pacific Possible* would be policy makers in and around the Pacific. As a study that looks at long-term opportunities and challenges, *Pacific Possible* would also seek to reach the broader public to engender a more informed debate on the economic development of the Pacific. It is also important that the key audience will vary for each theme of *Pacific Possible*. For some themes – such as labor mobility – the main objective will be to highlight to policy makers and the public in metropolitan countries the rationale for action. For other themes – such as fishing and working together – *Pacific Possible* would seek to reach both PICs and partner countries in and around the Pacific. Finally, given the global repercussion of issues such as sustainable oceanic fishing, climate change, or tourism, *Pacific Possible* would also be an important instrument to raise the profile of the Pacific in international debates.

4) Approach

28. This section highlights the key elements of our approach to analyzing economic opportunities and challenges for PICs. These include:

- A focus on transformational economic opportunities and challenges. In deciding which opportunities and challenges are truly transformational, *Pacific Possible* will focus on those which are likely to represent a significantly larger share of GDP in 2040 than they do in 2015. Many economic sectors (such as agriculture) that do not meet this test will nonetheless be considered outside *Pacific Possible* under other pieces of World Bank AAA (such as the Pacific Programmatic Agriculture AAA) or analytical work undertaken by other partners.
- Quantifying the potential contributions of these economic opportunities to GDP and fiscal revenue;
- Adopting a long-term perspective to consider long term changes in the economic environment of PICs as well as issues for which there is not a political consensus at the present time or which will have a long gestation period to show results;
- Connecting issues across themes, for example the present discussion of labor mobility focuses primarily on the generation of income earning opportunities for low-skilled workers in the PICs. However, with a longer term perspective, it will also be important to explore linkages between climate change and migration or within the theme of a Pacific knowledge economy linking labor mobility to the issue of diaspora networks which could create new opportunities for PICs;
- Engaging with and highlighting the important role of stakeholders in PICs, but also in countries around the Pacific such as Australia, China, Japan, Korea, New Zealand, and the U.S.
Focus on quantifying the economic potential of transformational economic opportunities

29. Previous work on economic development perspectives in the Pacific focused mainly on identifying weaknesses in the development environment, without clearly specifying what the expected economic gains could be. This led to ambitious reform agendas for reforms of the business environment, public financial management, macro-economic management, etc. which individually and -- even more so -- collectively, exceeded the thin technical capacities and limited political capital for substantive reform.

30. Pacific Possible proposes a different approach, that builds on previous work. It aims to identify and whenever possible quantify development gains that could be achieved, if the right preconditions were in place. The starting point is to identify a few development opportunities that hold the highest potential for PICs and ask the following question:

If these opportunities were fully realized, how much additional per capita GDP, employment, and government revenue could be generated, how big would the efficiency gains or savings be, and what would be the impact on individual livelihoods?

31. Approaches and methods are likely to differ for specific opportunities and challenges. They will include scenarios, experience of other countries, etc. To the extent possible, we would seek to answer this question for every country in the group, to be able to generate for each country a table that would tally the potential (positive or negative) contributions to GDP, employment, and government revenue of the transformational opportunities and challenges analyzed in Pacific Possible.

Table 1: Country X – Contributions to per capita GDP, employment and government revenue/expenditure by 2040

<table>
<thead>
<tr>
<th>Opportunity/Challenge</th>
<th>Additional contribution to per capita GDP</th>
<th>Additional contribution to employment</th>
<th>Additional contribution to government revenue/expenditure</th>
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<tr>
<td>Oceanic fisheries</td>
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<td>Seabed mining</td>
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<td>Tourism</td>
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<td>Knowledge economy activities</td>
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<td>Labor mobility</td>
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<td>NCDs</td>
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<tr>
<td>Disaster risk management/climate change</td>
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<tr>
<td>Total</td>
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32. A methodology note will be prepared that sets out how the proposed quantification would be achieved for each topic and how sectoral estimates would be converted into comparable aggregate indicators. In most cases, Pacific Possible will at best be able to suggest a range for various indicators, rather than point estimates. A clear exposure of assumptions and the sensitivity of results to these assumptions will be a central element of the Pacific Possible analysis.

33. Clearly, Pacific Possible cannot identify all developments and opportunities that may arise in the Pacific over the next 25 years. However, by seeking to quantify those that are already clearly discernible, it hopes to motivate and focus reform efforts and investments around these opportunities.

34. Pacific Possible will not cover all development issues and potential contributors to income and welfare. The focus will be on those, which could lead to a significant break to the low growth trajectory seen by many Pacific Island counties over the past one or two decades. For example, agriculture and coastal fisheries are clearly important for many PICs. However, based on what is known about PICs and their agriculture and coastal fisheries sector, it is unlikely that these sectors will become the drivers of transformative growth accelerations. However, they certainly will remain important elements of the PIC’s economies and require sustained government attention and donor support. In addition, important opportunities may exist in niche sectors which may be considered under other pieces of AAA beyond Pacific Possible.

35. Similarly, issues such as good governance and education are critical to the development of PICs. However, in the context of Pacific Possible we would consider them as inputs to the realization of identified development opportunities. By quantifying the potential gains from fully harnessing identified development opportunities, this would hopefully provide enhanced incentives to pursue necessary reforms in these areas. We would hope that our approach provides the necessary focus for reform where the potential gains from carrying out reforms and investments are clearly identified as opposed to an approach that advocates broad based reforms without identifying what the concrete benefits would be.

Long-term perspective

36. The long-term perspective adopted by Pacific Possible would consider major changes in the economic environment for PICs and their impact on the PICs development opportunities. Such changes include:
• Continued shift of the economic center of gravity towards East Asia, which could open new opportunities for PICs;
• Climate Change, with projected severe impacts on PICs, especially atoll nations;
• Demographic transition, urbanization, and migration in the PICs and the impact of these factors on economic growth, employment, and demand for public services;
• Aging of the population in more developed countries, creating potentially new labor market opportunities as well as increased demand for grey tourism;
• Increasing move towards a multipolar world, which could enhance the PICs strategic position in bilateral relationships and international fora as well as their value as peaceful locations for business, living, and tourism; and
• Continued progress in ICT technology, which could open new opportunities that are less constrained by the tyranny of distance.

Connecting issues across themes

37. Significant work on most of the themes proposed for analysis in Pacific Possible is already available and Pacific Possible will build on that. However, most of this work has focused on individual issues without paying much attention to the interaction among these development opportunities and challenges. For example, the present discussion of labor mobility focuses primarily on the generation of income earning opportunities for low-skilled workers from the PICs. However, with a longer-term perspective, it will also be important to explore linkages between climate change and migration or within the theme of a Pacific knowledge economy linking labor mobility to the issue of diaspora networks, which could create new opportunities for PICs.

Applying an environment, poverty and employment, and gender lens

38. Apart from the main focus on the economic impact of a few select development opportunities and challenges, we would also seek to look at each those opportunities through three different lenses:

39. Environmental impacts: PICs are home to some of the World’s most unique land and marine ecosystems. We will thus explore for each of the themes the interaction between seeking to harness an opportunity and the land and marine environment. The extent and nature of these interactions will clearly differ for each theme. For some themes, like moving towards a knowledge economy, the environmental
impact could conceivably be positive, for other themes such as oceanic fishing, harnessing the opportunity will clearly have to consider trade-offs and mitigating measures with respect to environmental impacts.

40. **Poverty and employment impacts:** For each of the themes we will seek to outline how an economic opportunity would help to generate new employment opportunities and impact on poverty. Such impact may be either direct, such as in the case of tourism where an expansion of the tourism sector could be expected to create new employment opportunities, or indirect, such as in the case of fishing, where the main impact on poverty would come through increased government revenue for the implementation of pro-poor social programs.

41. **Gender impacts:** for each theme Pacific Possible will explore whether there are any gender specific impacts as well as the scope for enhancing opportunities for women.

**Engaging with and addressing stakeholders inside and outside of PICs**

42. Pacific Possible recognizes that harnessing development opportunities and dealing with challenges does not only require actions by policy makers in the PICs, but often requires engagement from stakeholders outside the PICs. This includes in the first instance, neighboring countries around the Pacific Rim such as Australia, China, Japan, Korea, New Zealand, and the U.S who have the strongest ties to PICs through trade, investment, migration, and aid. However, some issues also speak directly to a global audience such as the impact of climate change or actions that impact on the health of the Pacific Ocean. During preparation of the report, the Pacific Possible team will thus seek to engage with a broad range of stakeholders. The findings of the report will not only require actions by the PICs, but equally from countries around the Pacific and in some instances, by the global community. This is a significant break from previous work, which tended to hand over long lists of necessary reforms to decision makers in the Pacific, without properly recognizing the role of metropolitan countries around the Pacific.

5) **Proposed thematic focus areas**

43. The identification of transformational development opportunities and challenges has been informed by previous work on growth opportunities for PICs as well as a series of consultations within the Bank and with regional stakeholders such as academic institutions in the region, regional organizations, development partners, and stakeholders from the private sector and from civil society in the PICs. The set of key themes for the Pacific Possible work includes the following:
(1) **Harnessing the Riches of the Pacific** (quantifying the opportunity to capture increased royalties from high-seas fisheries and the magnitude of the opportunity represented by seabed mining).

(2) **Islands in a Sea of Knowledge** (benefitting from the broad band revolution to improve public services and develop a Pacific knowledge economy);

(3) **Host to the World** (expanding sustainable tourism to the Pacific by tapping into new geographic markets (e.g. the East Asian market) and tourist products (retirement domiciles, meeting/conference/incentives/event (MICE) tourism through improved air access, marketing, and tourism product placement).

(4) **Labor Mobility** (growing seasonal labor market schemes but also going beyond them, e.g. by proposing fully liberalized labor market access for “climate refugees” from atoll countries to a range of Pacific rim countries (Aus, NZ, US, Japan, Korea)). **Pacific Possible** would examine the likely impact of fully liberalized labor market access for the 200,000 inhabitants of Kiribati, Tuvalu, Marshall Islands (i.e. the atolls nations in the Pacific) to Pacific Rim countries in the short and medium term.

(5) **Managing increasing stress on Pacific livelihoods** (strengthening PIC’s resilience to a range of threats from natural disasters/climate change to NCDs). This section would examine how PICs can act now to manage future threats.

(6) **Working Together** (enhanced regional and sub-regional cooperation in a number of well-defined areas and a look at the evolving financial architecture in the Pacific).

44. The following sections provide background on each of these themes and identify the key issues to be analyzed by **Pacific Possible**:

a. **Harnessing the Riches of the Pacific Ocean**

45. **Under this theme, Pacific Possible would look at two issues, namely fishing and seabed mining.** The 1982 UN Convention on the Law of Sea (UNCLOS) dramatically altered the sovereign rights of the PICs in terms of the area over which they exerted sovereign control. The treaty in effect altered the PICs from being small island states to large ocean states and was the single greatest transfer of property rights to fishing. The EEZs that were created greatly benefited the small island states of the Pacific and elsewhere. For example, Kiribati with a land mass of about 811 square kilometers (or, an area smaller than the size of San Diego) has approximately 3,500,000 square kilometers of ocean as its EEZ. UNCLOS, perhaps one of the most visionary treaties by the United Nations delves deep into the issue of Sea Bed Mining or Deep
Sea Mining. Therefore, the treaty not only supported the most significant redistribution of property rights for fishing, but may have also unleashed tremendous opportunities for the SPICs.

Fishing

46. The resources, services and biological diversity of the Pacific Ocean are essential to the economies and development of PICs, as well as being of significant value to the international community. For some Bank member PICs, especially the fishery-dependent small-island states (Federated States of Micronesia, Kiribati, Marshall Islands and Tuvalu) ocean resources such as fish stocks constitute the primary natural resource on which future economic growth will be based.

47. The region’s oceanic fisheries supply much of the world’s tuna, with global demand steadily increasing. The wider Western Central Pacific Ocean area produced 2.6 million tons of tuna in 2013, representing over half of all of the world’s tuna catch and yielding revenues at first sale in the order of over US$6.3 billion. Roughly 60 percent of this tuna catch was taken from PIC waters, or some 35 percent of the world’s tuna catch. The total first sale value of the tuna caught in PIC waters was estimated to be some US$3.4 billion in 2013, of which PICs received roughly 7 percent as a result of access fees paid by largely foreign fleets. Even at this relatively low level of return from what is one of the more profitable fisheries in the world, revenues from the sale of access rights constitute the largest single source of public revenues for a number of PICs. In addition to revenues from access fees, very little value addition takes place within the region. In many countries the diseconomies of isolation reduce the profitability or competitiveness of tuna processing operations.

48. The current and potential economic benefits that this natural capital asset provides to PICs depends on its underlying environmental status. In many cases the natural capital has been systematically undervalued over the last two decades, and increasingly overdrawn. More specifically, weaknesses in the institutions responsible for managing the use of this natural capital has often led to access arrangements which encouraged overexploitation, failed to provide incentives for conservation or prevent illegal fishing, and understated the true value of the resource. As a result, the region’s fishery resources were generally underperforming assets, and many have shown warning signs of overexploitation or are already overexploited – presaging a decline in benefits.

49. Oceanic fisheries hold great economic value and potential for the Pacific, and particularly the three tuna fisheries: tropical purse seine, tropical long-line and southern long-line fisheries. To date these fisheries are relatively healthy compared to other tuna fisheries throughout the world, due largely
to their relative isolation. However, they are now reaching their long-term sustainable limits, and future returns will have to come by earning more from current harvests, rather than increasing them. This is eminently possible but, because fish move across maritime borders, it will require continued collective action from countries to sustainably manage the resource. To date this has only begun to happen in the purse seine fishery (though progress is still fragile), though not yet in the two long-line fisheries.

50. In 2009 the eight countries who are Parties to the Nauru Agreement (PNA)\(^4\) introduced the vessel day scheme (VDS) to manage access to the fishery. It works similar to a ‘cap and trade’ scheme for fishing: each year the PNA countries set the total catch limit needed to maintain a healthy fish stock, and translate that catch limit into individual vessel fishing days, which are allocated to countries by a PNA Office (PNAO) based on an agreed formula, and then the countries sell the days. The vessels days are valuable because they limit catch to sustainable levels of production and this scarcity has value that can be traded. Prior to the introduction of the VDS, PNA countries captured little of the value of the tuna caught in their waters. As a result of introducing the VDS and subsequently a benchmark price, the price of a vessel day increased from US$1,500 in 2010 to US$6,000 in 2014, and total revenues to PNA countries increased from US$70 million in 2009 to an estimated US$280 million in 2014 (though still less than 10 percent of the value of the catch). A number of experts believe that the price of vessel days can continue to climb if the system is further strengthened, and this fishery could sustainably return over US$450 million per year to PICs. However for this to happen, compliance with the resource management system will need to be increased to strengthen its integrity (as for example some countries have exceeded the number of days allotted to them at the expense of the health of the resource), its scope expanded to cover as much of this regional fishery as possible, and its flexibility, transparency and efficiency increased (for example by pooling days among multiple countries, or selling them via auction). In addition, a similar management system could be introduced for the tropical tuna and southern albacore long-line fisheries, significantly enhancing the sustainability and the value of this natural capital asset, and subsequently the benefits that it can provide to PICs.

51. Pacific Possible would assess the outlook for the sustainable development of the oceanic fisheries sector in the Pacific and examine arrangements that would help to increase the contribution to national income and the fiscal revenue accruing to PICs while ensuring the sustainability of the

\(^4\) FSM, Kiribati, RMI, Nauru, Palau, PNG, Solomon Islands and Tuvalu. More than half of the WCPO purse-seine tuna catch, and about a quarter of the world supply of canning-grade tuna, comes from the exclusive economic zones of these 8 PICs. Tokelau also participates in the VDS, though is not a Party to the Nauru Agreement.
resource and environment. In particular, Pacific Possible would seek to estimate the potential revenue and contribution to GDP from improving and expanding access arrangements to fish stocks in the Exclusive Economic Zones of the PICs. Such arrangements could include the expansion of the VDS for tropical tuna and southern albacore long-line fisheries.

52. An important policy concern for many PICs is how their fisheries resources can be used to generate more employment, both onshore and on fishing vessels. A range of approaches is being used, including joint fisheries ventures (e.g., Tuvalu), onshore processing (e.g., RMI), or requirements to employ Pacific Islanders on fishing vessels. In many cases, such activities are subsidized through lower vessel day prices or other special arrangements under the Vessel Day Scheme. Pacific Possible will seek to inventory and analyze such arrangements in the Pacific, especially the cost effectiveness of existing arrangements.

Knowledge base: The World Bank has undertaken significant work on fishing in the Pacific as well as globally, which could be drawn upon for this analysis. This includes the preparation and implementation of the World Bank’s Pacific Regional Oceanscape Project (PROP) which provides support to fishing nations in the Pacific to strengthen the management of oceanic and coastal fisheries as well as habitats.

Seabed mining

53. Three fourths of the earth’s surface is underwater and the deep ocean represents the single largest habitat for sustaining life on the planet. It is often said that our understanding of the deep oceans are even less than our understanding of the galaxies and even today we are fairly ignorant of deep ocean eco-systems. However, over the last century or so, one thing has become increasingly clear, that there are many similarities between the terrestrial environment and the deep ocean sea floors both in terms of geophysical characteristics (they too contain similar features such as mountains, valleys and canyons, volcanoes, and large plains) and that just as in the terrestrial space, the ocean seabed also contains many of the same minerals. While the idea that there were minerals in the ocean has been known for over a century, and the idea that they could be productively mined has been around for more than half a century, in recent years this has moved from the realm of science fiction (Hollywood movie Leviathan 1989) to science and engineering reality with the first expected deep sea mining activity likely to start before the end of the decade in waters off the coast of Papua New Guinea’s province of New Ireland in the Bismark Sea.
54. **Deep Sea Mineral resources have only recently become economically attractive for exploitation.** There are a number of factors that support such resource exploitation and development – (i) increased global demand for these resources, combined with shrinking terrestrial opportunities, (ii) higher yield concentration in the ores than found in terrestrial mines, and (iii) technologies that have dramatically reduced the costs of exploration of the sea floor and new technologies that permit resource extraction. All these combined have today brought Deep Sea Mining to the cusp of reality.

55. **For the PICs, Deep Sea Mining is increasingly becoming a part of their national conversations.** This is understandable. As noted earlier, although the idea of exploiting seabed resources has been around for a long time, recent developments have once again brought this to the forefront. Firstly, there has been tremendous technological development over the last four to five decades – in computing, mining technologies and processing technologies, and accompanied by an enormous increase in demand primarily led by rapid growth in new and emerging economies. Furthermore, recent scientific research also suggests that the concentration of precious elements in deep sea ores is much higher than similar land based deposits even disregarding the fact that the grade of terrestrially found ores has declined in recent years. This makes deep sea mining a potentially viable area for exploitation in the coming years.

56. **There are four broad categories of marine mineral deposits that countries and companies are considering.** These are shown below.

<table>
<thead>
<tr>
<th>POLYMETALLIC (MANGANESE) NODULES</th>
<th>POLYMETALLIC SULPHIDES</th>
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<tr>
<td><strong>Distribution</strong>: Occurring widely, seafloor's abyssal plains, key area of interest - Clarion Clipperton Zone with water depth of 3500 to 5000m.</td>
<td><strong>Distribution</strong>: Also known as Seafloor Massive Sulphides (SMS). Found at tectonic plate boundaries along the mid-ocean ridges, back-arc ridges and active volcanic arcs at water depths of around 2000m for mid-ocean ridges.</td>
</tr>
<tr>
<td><strong>Elements</strong>: Nodules contain numerous metals including <em>inter alia</em>: manganese, iron, copper, nickel, cobalt, lead and zinc.</td>
<td><strong>Elements</strong>: copper, iron, zinc, silver and gold.</td>
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<tr>
<td><strong>Biodiversity</strong>: An extraordinary array of animal life including giant tubeworms, crustaceans, molluscs and other species. Species are considered endemic to vent sites and over 500 have been identified.</td>
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<tr>
<th>COBALT CRUSTS</th>
<th>PHOSPHORITE (OR PHOSPHATES)</th>
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<tbody>
<tr>
<td><strong>Distribution</strong>: Found accumulating on the slopes of sea mountains (seamount) at depths between 400 and 7000m.</td>
<td><strong>Distribution</strong>: Phosphorites are formed by chemical reactions in sediments and are typically found at water depths of 2 to 600 m. Two know areas include Namibia and near Chatham Rise southeast of New Zealand.</td>
</tr>
<tr>
<td><strong>Elements</strong>: Found to contain iron, manganese, nickel, cobalt, copper and various rare metals, including rare earth elements</td>
<td><strong>Elements</strong>: Accumulations of calcium phosphate that has extensive use in agricultural fertilizers</td>
</tr>
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</table>

Source: Global Ocean Commission (2013)
57. **The Pacific is becoming a hot-bed for DSM related activity.** Four Pacific Island States have applied to hold or sponsor DSM exploration contracts in ‘the Area’ (the seafloor beyond national jurisdiction, managed by the International Seabed Authority) – the first developing States to do so. Other Pacific Islands have expressed interest to do likewise. These Pacific Island governments face a complex array of technical challenges. Appropriate fiscal regimes to deliver equitable Government ‘take’, steps to manage those funds sustainably, and understanding of environmental impacts and the appropriate regulatory regimes remain untested. Moreover, social considerations, most often paramount to sustainable terrestrial mining operations, largely remain unaddressed.

58. **As per current policy, all exploration and exploitation outside of national jurisdictions has to be authorized by the International Seabed Authority, an agency established by UNCLOS and all parties to UNCLOS automatically become members of the ISA.** The ISA is headquartered in Kingston, Jamaica. Although a tremendous amount of exploration is taking place and nearly 1.5 million square kilometers of seafloor have been allocated for purposes of exploration, other than the shallow dredging type activities taking place in some coastal areas, deep-sea mining activities are yet to commence. So far, only one commercial exploitation license has been granted and this is the Solwara 1 project which is located off the coast of New Ireland Province (Papua New Guinea) and in the Bismarck Sea.

59. **Pacific Possible will undertake a stock-take of Deep Sea Mining – given the transformative nature of all the key themes.** *Pacific Possible* will aim to:

- summarize the current economic DSM opportunity for PICs and the broad elements within an appropriate fiscal regime;
- itemize risks and associated mitigation measures for SPIC governments; and
- provide an analysis of environmental / social regulatory compliance & fiscal regimes.

*Knowledge Base:* There is a rich body of current research by SPC and ISA as well as some initial assessments of economic, fiscal, social and environmental issues by the World Bank.

b. **Islands in the Sea of Knowledge**

60. **In order to harness the benefits recent investments and policy reforms, particularly in the ICT sector, it would be critical to develop a vision of PICs as knowledge economies, where knowledge becomes a key driver of development.** Given the remoteness of the PICs, the vision of a knowledge economy would entail better integration and participation of PICs in the global knowledge economy. This
is of particular importance as the cost of physical transportation of goods and people is unlikely to decline. The objective of this study will therefore be to closely examine the kinds of opportunities that could enable the PICs to make the transition to a knowledge economy by 2040.

61. A knowledge economy is one in which knowledge is acquired, created, disseminated, and applied to enhance economic development. A range of potential applications are already on the horizon, including e-government, e-learning and access to massive open online courses, remote diagnostics in health, and a variety of ICT and business applications. The vision could also entail the development of specific “centers of research excellence” in areas such as marine and ocean science.

62. However, it is also well established that ICT investments by themselves do not automatically transform a country into a booming knowledge economy. Complementary investments in education and skills, innovation systems, and an appropriate economic and institutional regime are essential. Making the move to a knowledge economy involves more than developing high technology industries, investing in ICTs, or acquiring new technologies for use in a narrow fringe of the economy. Rather, it involves a more systemic change in the overall functioning of the economy, in which knowledge (both new and existing) and innovation (development and commercialization of products and processes that are new to the firm, the market, or to the world) penetrate all sectors of economic activity. In so doing, the economy generates new goods and services, increases productivity, gains efficiency in the delivery of services, and improves welfare.

63. Pacific Possible would seek to examine the following issues:

- Illustrate the benefit of a knowledge economy-based development process by using the existing literature on comparator countries as well as possible existing information on the PICs. This would help to show how the knowledge economy can impact growth, productivity, employment, etc. for the islands.
- Develop a “list of potential opportunities” that could be relevant for the PICs looking ahead.
- Examine the link between structural characteristics (small size, relatively high wages, etc) and see what this means for the development of a knowledge economy for the PICs.
- Undertake a broad “scan” of all countries in the Pacific in terms of their current situation/endowments, and then map what potential opportunities could lie ahead for them (a matrix could show this, either by each country or by potential groupings of countries). This scanning should help identify some key opportunities that could emerge for the PICs. And then
for these to take root, it would be useful to identify the kinds of necessary investments in ICTs, in education and skills, in innovation, and in the overall economic and institutional reforms that would be needed for such a transformation.

• Taken together, analyse how these potential opportunities could contribute to the economic growth of the PICs, and what would be the potential impacts on the environment, poverty and employment, and on gender.

64. In sum, the study would provide a vision of what the knowledge economy could look like in the PICs by 2040 and outline the kinds of investments that would be needed starting now to make this happen. Pacific Possible would focus primarily on the “what” and the opportunities that could be harnessed by PICs. Then there is the question of the “how to”? What can be done at the country level, the regional level (inter-PIC collaboration), and at the international/global level (cooperation with the rest of the world and notably with big neighbours (e.g. Australia, New Zealand, Indonesia, China, Japan, Korea and the US).

Knowledge base: The World Bank is heavily involved in supporting ICT investments in the Pacific and is also carrying out work on potential applications of enhanced ICT availability and links to job creation. Work is ongoing in education and reforms are also being undertaken on the overall business environment side. The Trade and Competitiveness Global Practice has some valuable global experience on the knowledge economy and on innovation and entrepreneurship that could be useful for PICs.
c. Host to the World

65. **Tourism plays an important role in many PICs.** Palau and Cook Islands are the most tourism dependent nations worldwide according to Table 1. Tourism also contributes a large share of GDP in Fiji, Samoa and Vanuatu. Other PICs have been less successful in developing their tourism sectors. In FSM, Kiribati, RMI, Solomon Islands, Tonga, and Tuvalu it contributes less than ten percent of GDP.

66. **With about 70 percent of tourists to PICs originating in Australia and New Zealand, the scope for increasing the number of tourists from these countries may be limited.** However, the rapidly growing Asian market still holds enormous potential. Outward tourism in China and other Asian countries is increasing rapidly, but so far, the PICs (with the exception of Palau) have not been able to attract Asian tourists in significant numbers. In addition, diversification of the tourism product from traditional beach tourism into areas such as deep-sea fishing, conference tourism, or long-term stays during retirement could also help expand tourism in PICs.

67. **Pacific Possible would carry out a critical quantitative assessment of how much additional GDP and employment could be generated from tourism related activities by 2040 in the 11 PICs included in the study.** Palau may already be close to its tourism carrying capacity and the challenge may be to increase revenue per tourist rather than the number of tourists. For other countries, increasing the number of tourists and revenue per tourist may be the main challenges. An important issue for all countries is also to maximize the share of tourism spending that accrues to the national economy and contributes to employment and government revenue. At the same time, countries have to manage the social, cultural, and environmental impacts of tourism. This paper would review options for a sustainable expansion of tourism in PICs and identify key measures (such as improved air access, marketing, and tourism product) to make such opportunities a reality.
68. Air transport plays an extraordinarily important role for PICs as by far the single most important means for travel in the Pacific. While it is often identified as the main constraint to the expansion of Pacific tourism, it also plays an important role in facilitating labor mobility, trade, and knowledge exchanges. Having efficient market structures is thus critical to ensuring efficient air services. However, the unique economic geography of the Pacific could also imply a mismatch between private and social costs and benefits of air services, which could justify various forms of government interventions. Examples of such interventions are the currently prevailing not fully liberalized market structures or Cook Island’s subsidization of air connections. Pacific Possible would review the provision of air services in the Pacific, private and social costs and benefits of air services, and propose arrangements that would maximize the social net-benefits of air transport in the Pacific.

Knowledge base: The WB and IFC are currently engaging in analytic work in the Pacific, including innovative work done in collaboration with cruise ship operators and a study on air access to PICs. The World Bank is currently supporting a regional project for Pacific Aviation, which, inter alia, has generated regional aviation demand forecasts. There is also a recent report on aviation sector market structures by the Brattle Group, which was commissioned by Fiji Airways.

d. Labor Mobility

69. Given the limited carrying capacity of PICs and their vulnerability to natural disasters, migration has always been an important coping strategy in PICs. However, the creation of nation states in the Pacific has limited the scope for migration for Pacific Islanders. Nonetheless, it is broadly recognized that access to labor markets in more developed regional economies, including the U.S., Australia, and New Zealand can generate benefits for both labor sending and receiving countries. For labor sending countries, benefits include remittances, easing of social and labor market pressures, and potential investment and knowledge transfers through diaspora linkages. Benefits for labor receiving countries include the filling of labor shortages in selected areas and higher productivity of Pacific workers as compared to backpackers and other casual workers. In addition, migration is a potential response to climate change and rises in sea levels, which could result in a significant deterioration of the capacity of some PICs to sustain current or increasing levels of population.

70. Both permanent and temporary migration play important roles. New Zealand alone is home to about 296,000 “Pacific peoples,” a number that equals the combined population of Samoa and Tonga, from where most Pacific people in New Zealand originate. The North Pacific island countries benefit from open access to the US under the Compact of Free Association with steady flows of migrants taking
advantage of this opportunity. Seasonal employment schemes have also been established in recent years, with about 7,000 Pacific islanders working under such schemes in New Zealand and about 2,000 Pacific islanders in Australia in FY13/14. For FY14/15, Australia increased the quota under its seasonal workers program from 2500 to 3250. In 2015, the cap was lifted altogether.

71. **Pacific Possible would examine the economic, demographic and social implications of scenarios where opportunities for temporary and/or permanent migration are significantly enhanced.** Elements of enhanced labor mobility would include increased access to a wider range of opportunities; expanding the range of target countries for Pacific migration; higher skilled labor mobility options (which in turn would require investments in education and skills development), etc. One possible scenario could be the widening of opportunities for migration from atoll countries such as Kiribati and Tuvalu as a response to the risk of sea level rises. Drawing on the experience of countries that already have open labor market access to metropolitan countries (such as the North Pacific countries or the Cook Islands) or where labor mobility was established between areas with significant differences in income (as in the case of German unification) could be instructive. The analysis of economic benefits to labor receiving countries would help to build the case for increasing access for Pacific islanders. At the same time, concerns about the social impact of permanent and seasonal migration on the labor sending countries would also need to be explored and mitigation strategies designed.

**Knowledge base:** The WB has a deep and longstanding engagement on labor mobility issues through its Pacific program on labor mobility which could provide the main inputs on this topic.

e. **Managing increasing stress on Pacific livelihoods**

72. **Pacific livelihoods are under stress from many sources.** Natural disasters and the impacts of climate change such as the projected rise in sea levels that threaten the physical existence of Pacific islanders and their assets and, especially for atoll islands, the existence of these islands themselves. The *Pacific Plan* notes the importance of continuing the development of adaptation and mitigation efforts linked to the Pacific Climate Change Framework 2006-2015 and the Pacific Disaster Risk Reduction and Disaster Management Framework for Action 2006-2015. While some progress has been made, the situation remains extremely serious for Pacific Islands, referred to now as a Climate Crisis rather than Climate Change. Another threat arises from the spread of unhealthy lifestyles including eating, drinking, and smoking habits, that have already resulted in a non-communicable disease crisis that impacts not only on the quality of life of Pacific islanders, but also threatens to lead to an explosion in health care costs that could overwhelm the fiscal capacity of these countries.
73. While at first glance it might seem odd that these two issues are combined under one heading, the objective in both cases is to reduce costs over the long run – through climate change related disaster mitigation and through addressing the health crisis or the non-communicable diseases epidemic in the Pacific Island countries. Both are reviewed briefly below.

**Bending the Cost Curves through Disaster Mitigation**

74. The PICs are some of the most disaster prone countries in the world, something that Pacific Islanders have known for centuries as repeated generations have borne the brunt of devastating natural disasters such as cyclones and tropical storms, flooding, earthquakes and tsunamis, volcanic eruptions, etc. Such disasters, which occur almost without warning, are referred to as sudden onset disasters. The frequency and intensity of sudden onset disasters have increased over the last half century which, in the case of cyclones and flooding, is being linked more and more often to climate change factors. In addition, there are a whole host of other issues, referred broadly as “slow onset” disasters such as, drought, coral death, and saline intrusion into water aquifers. On average, Vanuatu loses about 6.6 percent of GDP per annum due to natural disasters. If Climate Change will increase the frequency and intensity of storms and cyclones over the next fifty years, it is then likely that Vanuatu’s vulnerability levels will increase and it may lose a greater proportion of its GDP to storms assuming that all other factors remain unchanged.

75. Countries in the region are already using mechanisms to reduce the impacts of storms and cyclones. Cyclone Pam which struck Vanuatu in March 2015, caused damage and losses equivalent to 64% of Vanuatu’s GDP. However, even though this was a Category 5 storm, in terms of loss of life, less than a dozen people died as a direct result of the storm and reiterated the importance of the early warning systems in place. Through adaptation mechanisms and by building resilience in systems, countries could protect themselves in the medium to long run and lower costs needed for rehabilitation and rebuilding.

76. *Pacific Possible* would ideally seek to determine the net savings that can be achieved between now and 2040, if countries in the region became more prepared to deal with the impacts of climate change – through sudden and slow-onset disasters. This estimation is a difficult task. It involves being able to estimate various scenarios well into the future. For example,

- how are both the frequency and intensity of storms and cyclones likely to change over the coming years?
• How would we estimate losses given that over the long term there will be significant changes in the composition of assets exposed to such shocks and hence their respective vulnerabilities and damage functions?
• How effective would mitigation strategies be and how does one prioritize mitigation efforts?

77. The existing Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) model will be used to obtain estimates of damages under a variety of scenarios. The current model may need to be modified to accommodate recent climate and weather trends not captured in the current model and which may tend to bias downwards any assessments of long-term risk.

78. Pacific Possible will also examine what needs to be done to build more resilient societies in the long term (2030-50). This would include a discussion on strategic issues such as: (i) will PICs be able to reach their development targets and achieve poverty reduction and shared prosperity, taking into account current and future risk, (ii) what can be done to reduce the risks by (for instance) 50% and how can we measure progress in resilience building, (iii) what are the key options and the framework for decision making, including robust decision making under uncertainties; what are the low regret strategies, (iv) what is the vision for Atoll Islands (protection vs migration), etc.

Knowledge base: The World Bank has a deep engagement on disaster risk management, including through the Pacific Risk Insurance scheme and on Non-communicable diseases. CSIRO studies provide good information on climate change impacts. There is also significant work on urbanization by UN Habitat and ADB. Relatively less work has been done on issues related to social cohesion and development.

Bending Cost Curves in Health

79. Cardiovascular diseases (CVD), cancers, chronic respiratory diseases and diabetes are no longer synonymous with wealthy countries and ageing populations. No region of the world embodies this reality more dramatically than the Pacific Islands Countries (PICs). Despite demographic ‘youth bulges’, 40% of the region’s population of 9.7 million has been diagnosed with an NCD. Almost 2 out of 3 pacific islanders who die from an NCD, die before the age of 70 and the probability of dying from an NCD between the ages of 30 and 70 in the PICs is three times higher than in neighbouring Australia and New Zealand. At the same time, maternal, child health, and infectious disease challenges are still present. This creates a double burden of disease with profound impact on economies and communities that PICs have to address.
in a much compressed timeline with limited resources. Leaders of the region have declared NCDs “a health and economic crisis and a threat to human development” in 2011.

80. Health gains for NCDs can be achieved much more readily by influencing public policies in sectors like trade, taxation, education, agriculture, urban development, food and pharmaceutical production than by making changes in health policy alone. It is estimated that up to two thirds of premature deaths from NCDs are linked to exposure to four common risk factors (tobacco use, harmful use of alcohol, unhealthy diets and physical inactivity) and up to half of all premature deaths are linked to weak health systems that do not respond effectively and equitably to the health-care needs of people with NCDs.

81. NCD statistics in the region are alarming. The top 7 most overweight countries in the world are from the region while eight Pacific Island Countries are amongst the global top ten for highest diabetes prevalence. Close to 40% of Micronesians and Palauans, nearly a third of Marshall Islanders and a quarter of I-Kiribati suffer from the chronic condition. Every 12 hours a Fijian loses part of his or her lower limbs to diabetes. Cardiovascular disease alone accounts for between 29% and 38% of all causes of death combined. The burden of lung cancers attributable to smoking is also growing rapidly.

82. The NCD epidemic is a relatively new phenomenon in the Pacific. However, it is expanding at an alarming rate. Obesity was uncommon in the mid-20th century, but between 1980 and 2008, the Body Mass Index (BMI) of females in nine Oceania countries increased by more than 4 times the global average. Childhood and adolescent obesity is high and rising. A double burden of malnutrition is also observed in the Pacific where undernutrition exists concomitantly with obesity. Micronutrient deficiencies are also an issue and often related to an increased intake of calorie dense, nutrient poor, ultra-processed foods. Diabetes was virtually absent from the region in the 1960’s. It now accounts for an extremely large fraction of mortality and disability, particularly amongst middle-aged women. The number of diabetic patients in Tonga for example has doubled in just 8 years while related amputations have increased three fold in the last five years.

83. The present extent and distribution of behavioural risk factors suggest that the situation will worsen in the years to come. Male smoking prevalence ranges from 20% in Fiji to over 70% in Kiribati and is increasing among girls (62% in Palau, 57% in Northern Marianas). Physical inactivity reaches alarming levels particularly among women (75% in Micronesia) and unhealthy diets are widespread with all countries reporting over 70% (ranging from 70 to 95%) of their populations having low fruit and vegetable consumption.
84. These modifiable risk factors are strongly influenced by other sectors policies. Rapid social and cultural change linked to relatively recent shifts from subsistence to market-based economies; poorly planned urbanization and increasing international trade integration (globalization) constitute major determinants of NCD epidemics in the region. Trade liberalization combined with the promotion of export oriented agriculture in particular, are greatly contributing to profoundly modified food environments. At the same time, Governments and development assistance agencies have tended to neglect the producers who sell food on local markets. Energy-dense foods high in fat (e.g. butter, oils, fried foods), sugars or starch have largely displaced fruits and vegetables in Pacific diets. Evidence suggests that these changes are driven by marketing, affordability, convenience and availability. Price differences between fatty imported meat parts and healthier sources of protein such as local fish, for example, often range between 20 to 50%. The total available energy and fat supply has increased in all PIC countries by as much as 64% since 1965. In Fiji, per capita yearly consumption of sugar-sweetened beverages and butter has doubled in just 10 years. Household expenditure on imported foods is considerably high in all countries ranging from above 50% in Kiribati and Tonga to 30% in Vanuatu and Solomon Islands.

85. Health-related costs are rising and expected to become untenable. Per capita health expenditure has increased substantially over the years and is consistently higher than the average for Lower Middle Income Countries (LMICs) in most of the PICs. These investments have translated into good progress addressing some communicable diseases and most PICs are on track for achieving MDG 4 and 5. Unfortunately, similar health outcomes are not realised for NCDs although some estimates claim that 40 to 60% of government spending on health is expended on tackling NCDs (essentially curative and palliative care). The current situation is already unsustainable. The World Bank estimates for example that the average yearly cost of dialysis for a Samoan citizen amounts to more than twelve times the per capita Gross National Income.

86. Therefore, can we bend the cost curve over the long run to in order to effectively lower costs due to NCDs? Failure to address this can easily wipe out any gains these countries could realize through tourism or deep sea mining or fisheries, etc. It is therefore important to slow the rising costs for health care. While adaption costs are fraught with uncertainties since it is difficult to know the cost structures for climate change adaptation, however for the case of NCDs, this is likely to be relatively easier since much of the costs would focus largely on prevention (the costs for this are a bit clearer), treatment for those already ill (easier to estimate) and an assessment of indirect social costs (which are often complicated to assess). In 2001, these indirect costs were estimated to be as a percent of GDP around
1.62% in Samoa, 1.50% in Fiji; and 0.80% in Tonga respectively, and reaching up to 6.5% of GDP in Nauru. These figures are undervalued because they are only calculated for the economically active population in the formal sector. They also do not account for social costs such as unpaid care work by family members, principally women and young girls – some having to be pulled out of school to care for bedridden or disabled relatives. This situation exacerbates poverty and vulnerability in Pacific communities. The cost of pain, suffering or insecurity associated with a lack of knowledge about one’s condition or its future prognosis is also rarely considered.

87. **Knowledge base:** Together with UNDP and WHO, the WB prepared a NCD Roadmap for PICs in 2014.

88. **Working together**

PICs are characterized by small size, remoteness, and dispersion over the vastness of the Pacific Ocean. Recent work has highlighted that these country characteristics result in governments that are relatively large in relation to the size of the economy of these countries, but are still too small in absolute terms to be able to cover fully core government functions. In order to overcome the constraints of thin capacity, Pacific governments are working together in a number of areas such as tertiary education (through the University of the South Pacific). TA is also frequently used to overcome the limitations of thin capacity. Regional approaches to TA are already being used or developed by the Bank as a more cost effective approach for delivering TA than doing it country by country. Examples include support for aviation safety; fisheries management; or telecoms regulation. There are many more areas where cross-country collaboration would allow improved service delivery.

89. **At present, the region is of limited interest to foreign businesses and investors who incur high transaction cost in dealing with different trade and investment procedures and regulations in very small markets.** Harmonizing procedures and regulations would help reduce transaction costs for trade and investment and thus generate more investor interest and competition.

90. **Regional partner countries** (primarily Australia, New Zealand, Japan, the US, and increasingly China and Korea) also play a critical role in this area. Firstly, as they are often the main trading partners and source of tourist and investment for many of the PICs, their policy framework and regulations have an important impact on PICs. For example, their regulations (phyto-sanitary, for example) often constrain trade. An important question is also whether it might make more sense for Pacific countries to adopt their
regulations and regulators rather than develop their own. Second, with the significant role of development assistance in the Pacific, the question of how to best to deliver aid and the appropriate design of the relationship between providers and recipients of development assistance is critical, when the expectation is that it will entail long-term budget support and capacity supplementation.

91. Fiji’s recent return to democracy and the economic strengthening of PNG are likely to change the dynamics of Pacific regionalism. Being the largest and most central country in the South Pacific, a stable Fiji could play an important leadership role in the region and exercise a positive impact on the economic development of the entire region. PNG has recently also expressed and to some extent demonstrated its desire to use its resources to play a positive leadership role in the region.

92. As highlighted in the 2013 Review of the Pacific Plan, regional integration has made little progress as a result of countries’ unwillingness to cede sovereignty to regional bodies. Progress in regionalism will thus need to be grounded in a clear demonstration of the benefits of regional action as well as new approaches drawing on past experience. This paper would focus on two interrelated issues that are critical for greater regionalism:

   Gains from working together

93. To date most efforts for enhanced regional collaboration have focused on collaboration among PICs. However, PICs typically have very limited economic ties among themselves. Most of these ties, trade, aid, migration, technical assistance and collaboration, security, etc. are either with metropolitan countries such as Australia, New Zealand, Japan, China, and the U.S. as well as with Fiji due to its central location in the South Pacific. The paper would review more pragmatic approaches to working together, both among PICs, but also between PICs and the metropolitan countries in the Pacific. Such interest-based regionalism is likely to involve typically sub-groups of countries rather than all PICs. Given the strength of economic ties between the PICs and metropolitan economies, the paper would explore whether there is scope to exploit these relationships to help overcome some of the constraints imposed by the remoteness and small size of the PICs, while ensuring that such relationships are balanced and consistent with participating countries’ sovereignty and unique development paths. The analysis would explore these questions from

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5 For a recent review of experience see also Matthew Dornan and Tess Newton Cain. Regional Service Delivery among Pacific Island Countries: An Assessment. Asia & the Pacific Policy Studies, vol. ••, no. ••, pp. ••–••.
the perspective of a few selective service delivery objectives and identify economic efficiency associated with various approaches. In particular, Pacific Possible will review potential gains that could be achieved through greater collaboration in procurement.

94. **Pacific Procurement:** Public procurement in the Pacific Islands faces many challenges including, in particular, remoteness and small markets. These countries’ economies are very small and the combined regional procurement spend amounts to only $1.1 billion a year. Consequently, PIC governments are unable to generate demand at sufficient scale to attract foreign suppliers and contractors. In addition, the islands’ distance from major industrial and trade centers significantly increases logistics costs and limits choices of different products. While these challenges are structural and cannot be completely overcome, they could be better mitigated with more appropriate procurement strategies relying on modern tools and approaches.

95. The Pacific Plan suggests further analysis on the development of proposals or strategies for regional bulk purchasing, storage and distribution of key import commodities, such as pharmaceuticals, etc. For example, prices for drugs differ widely across SPICs, resulting from a combination of inefficient market structures and procurement arrangements. Given the significant volume of expenditures and decentralization reflecting the way services are delivered to communities, Health is one of the sectors where there have already been some discussions about leveraging more strategic purchasing strategies. For example, an “Informal Consultation on Pooled Procurement of Essential Medicines for Pacific Island Countries” was held in Nuku’alofa, Tonga, on 6 August 2007 and a report prepared by the WHO in this occasion proposed several options to improve procurement of medicine. One of the recommendations was to “Establish a new pooled procurement scheme with the participation of other bigger Pacific island countries, using the group contracting model as a reference”6. However, there are likely other item groups where equal or greater opportunities for savings exist and/or which are easier to implement.

96. **Pacific Possible would seek to provide estimates of cost savings that could be achieved through alternative procurement arrangements for a few items that constitute a significant part of SPIC government budgets, such as drugs in the health sector, fuel, or construction materials.** In particular, Pacific Possible would

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1) Build upon previous relevant assessments as complemented by additional data collection and analysis to identify procurement items that represent the largest expenditures in the target countries;

2) Identify key opportunities for increasing cost efficiency (including through consolidation);

3) Quantify projected savings.

**Knowledge base:** The World Bank has significant engagement in the Region through its operational project work and engagements on Public management reform.

**An evolving financial architecture.**

97. **Aid represents an important aspect of public service provision in most of the PICs.** PICs receive the highest amounts of aid on a per capita basis of any countries in the world. In addition, the sources of aid are highly concentrated, with Australia providing the bulk of aid to the South Pacific and the US to the North Pacific. The Pacific Plan highlights the need for greater aid effectiveness. Progress has been made with the adoption of the Cairns Compact on Aid Effectiveness, and its monitoring through the PIFS led peer review process. While there is an increasing acceptance that aid will need to continue to play an important role in most PICs for the foreseeable future to support living standards and public service delivery, aid objectives and delivery mechanisms are still mostly designed with a medium term horizon rather than as long-term partnerships. While aid on a per-capita level is high, available grant funding is often insufficient to cover countries’ infrastructure needs, leading them to consider financing in the form of concessional and non-concessional financing.

98. **Several Pacific countries (Tuvalu, Kiribati, Palau, FSM, and RMI) have sovereign wealth or trust funds in which they accumulate natural resource rents and donor funds as a means of dealing with volatility and to ensure intertemporal smoothing of revenues and expenditures.** If revenue from fishing and, further into the future, maybe also sea-bed mining, increases significantly, sovereign wealth funds may become important tools to manage such revenue intertemporally and intergenerationally.

99. **In addition, the landscape of providers of financing and technical assistance to PICs is also undergoing significant change.** China and several other Asian nations are scaling up their engagement in the Pacific, while Australia is currently undergoing significant cuts in its aid program (though so far not for the PICs). U.S. funding for the North Pacific is also undergoing change under the Amended Compacts with Palau, FSM, and RMI, with a major transition scheduled for 2024, when funding through Sector Grants will
end, to be replaced by revenue from Trust Funds. With the PICs’ vulnerability to climate change, the design of and access to new funding sources to deal with climate change is of critical importance to PICs.

100. Pacific Possible will review trends in sources of financing for PICs and consider financial arrangements that would be most effective to fund service delivery and investments.

Knowledge base: The Pacific Island Forum Secretariat and the ADB have done significant work on opportunities for regional approaches. The World Bank has primarily focused on the analysis of the public sector in the Pacific as well as regional approaches on specific issues.
6) Process, partnerships, deliverables, timetable, budget, and team

a. Process

101. Preparation of the *Pacific Possible* would combine analytic work with a process of consultations and outreach activities.

102. The first phase of the work will entail the preparation of background papers under the leadership and responsibility of the relevant World Bank Global Practices (GPs) and in collaboration with regional and international partners (Annex 1). Upon completion of the background papers, these would be presented for review and feedback.

103. Once the background papers have been prepared and discussed, the team will prepare a concise summary document, which would seek to arrive at an aggregate assessment of what the realization of potential development opportunities could imply for economic growth and living standards in the Pacific and to draw up an agenda of needed actions to exploit these opportunities.

b. Advisory Committee and Reference Group

104. As part of the *Pacific Possible* effort, we have established a high level Advisory Committee. The committee is expected to help guide the team tasked with developing this report by assessing the overall scope, content, research quality, relevance and practicality of the various sections of this report. More specifically, the Advisory Committee will:

- provide guidance on policy, technical and economic issues that emerge through the course of the study;
- help identify gaps in the proposed study;
- assess and provide guidance and advice on specific material generated by this effort;
- review drafts of background papers and the overall report;
- provide guidance to support the dissemination of the report in relevant countries.

105. We have informed all heads of government of the 11 PICs which are members of the World Bank of the *Pacific Possible* initiative and invited them to nominate representatives to the Advisory Committee (at the level of the Minister of Finance, with an alternate, not ranked lower than the Permanent Secretary of the Ministry of Finance or equivalent). Such appointments will help to lower transaction costs considerably given that there are several opportunities every year where Finance Ministers and/or their Permanent Secretaries meet both in the region and elsewhere.
106. In addition to PICs, we have also reached out to major Pacific Rim stakeholders (Australia, China, Japan, New Zealand, Korea and the US) and asked them to appoint suitably senior representatives to the Advisory Committee. The reason for reaching out to both countries in and around the Pacific is that some of the recommendations from Pacific Possible may require joint action between PICs and their partners.

107. We are proposing that the first meeting of this Advisory Committee be convened on the margins of the World Bank/IMF Annual Meetings scheduled for October 9 to 11, 2015, in Lima, Peru. If there are reasons for the Committee to meet out of session, this can be dealt with on an ad-hoc basis as the needs arise. It is expected that members on the Advisory Committee will stay through the duration of this effort which is expected to be completed by June 2016, or through their period of tenure, whichever comes first.

108. In addition to the Advisory Committee, we are also convening a much larger, working-level Reference Group of representatives from government ministries, development agencies, academia, the private sector and civil society. The Reference Group would typically interact by email and would provide comments on terms of reference for background papers in each of the 6 areas to be considered under Pacific Possible as well as more technical comments on the analysis and conclusions of both the background papers and the actual Pacific Possible report.

c. Partnerships

109. At the level of specific themes and the technical work, Pacific Possible would seek to partner with regional institutions and experts to make sure that existing knowledge and expertise is effectively tapped but also as a means to foster greater regional ownership of the work. Various regional, academic and research institutions have been approached and expressed their interest in collaborating on Pacific Possible. These include the Secretariat of the Pacific Community (SPC), the Forum Fisheries Agency, the Parties to the Nauru Agreement, academic and research institutions in the Pacific and in partner countries such as the Australian National University (ANU), the Korea Institute of Ocean Science and Technology, the Pacific Island Development Program at the East-West Center of the University of Hawaii, and Peking University.

110. Within the Bank, preparation will be done in partnership with the relevant GPs and IFC and also seek to bring in knowledge from work on small island states outside the Pacific. A staff working on the Caribbean has thus been selected to be part of the Pacific Possible team.

d. Deliverables
111. Key deliverables would include the following:

- 9 background papers on identified issues
- A Summary report and presentation
- Engagement and dissemination materials and activities
- 2 rounds of regional workshops – one to discuss background papers and one to discuss the draft Pacific Possible report.

e. Communication and engagement strategy

A draft communication plan for Pacific Possible is under preparation. It will identify key audiences and engagement strategies. Importantly, it will seeks wide engagement throughout the Pacific Possible preparation process, rather than just focusing on dissemination once the report has been prepared. It will include a variety of approaches and tactics, including the preparation of short videos, use of social media assets, as well as a series of outreach events.

f. Timetable

June/July – Concept note and TORs circulated for review and feedback

mid 2015 – Commissioning of background papers and TORs

October 2015 – draft background papers to be discussed by the Advisory Group at the WB-IMF Annual Meetings in Lima, Peru

November 2015 – draft background papers to be discussed at regional workshop

December 2015 – background papers finalized

May 2016 – draft Pacific Possible report presented at a regional workshop

September 2016 – launch of final report

g. Team

112. Preparation of Pacific Possible would be led by Robert Utz and Venkatesh Sundararaman (Program Leaders, EACNF) supported by Kim Edwards (Economist, MFM), Sona Varma (Senior Economist, MFM), Kara Mouyis (Communications Officer), and Sam Evans (Program Assistant, EACNF) with overall guidance and leadership provided by Franz Drees-Gross (Country Director, EACNF). Preparation of background papers would be led by staff from the relevant GPs.
## Annex 1: Background papers

<table>
<thead>
<tr>
<th>Background Papers</th>
<th>Lead</th>
<th>GP</th>
<th>Possible External Partners</th>
<th>Coordinator</th>
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<tbody>
<tr>
<td><strong>Harnessing the Riches of the Pacific Ocean</strong></td>
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<tr>
<td>1. Seabed Mining</td>
<td>Michael Stanley/Stefanie Sieber</td>
<td>Energy and Extractives/Environment and Natural Resources</td>
<td>SPC</td>
<td>VS</td>
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<tr>
<td>2. Fishing</td>
<td>Charlotte de Fontaubert/Stefanie Sieber</td>
<td>Environment and Natural Resources</td>
<td>PNA, SPC</td>
<td>RU</td>
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<td><strong>Host to the World</strong></td>
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<tr>
<td>3. Tourism (including aviation)</td>
<td>John Perrottet/Hannah Messerli</td>
<td>Trade and Competitiveness</td>
<td>Tbd</td>
<td>RU</td>
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<tr>
<td><strong>Islands in the Sea of Knowledge</strong></td>
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<tr>
<td>4. Knowledge Economy</td>
<td>Anuja Utz</td>
<td>Education/Trade and Competitiveness/Infrastructure and ICT</td>
<td>Tbd</td>
<td>VS</td>
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<td><strong>Labor Mobility</strong></td>
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<tr>
<td>5. Labor Mobility</td>
<td>Manjula Luthria</td>
<td>Social Protection and Labor</td>
<td>ANU</td>
<td>VS</td>
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<tr>
<td><strong>Working Together</strong></td>
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<td>6. Procurement</td>
<td>Alex Borges</td>
<td>Governance</td>
<td>Tbd</td>
<td>RU</td>
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<tr>
<td><strong>Managing Increasing Stress on Pacific Livelihoods</strong></td>
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<tr>
<td>8. Climate Change</td>
<td>Denis Jordy</td>
<td>Environment and Natural Resources</td>
<td>SPC/SPREP</td>
<td>VS</td>
</tr>
<tr>
<td>9. NCDs</td>
<td>Xiaohui Hou</td>
<td>Health</td>
<td>SPC/UNDP/WHO</td>
<td>VS</td>
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